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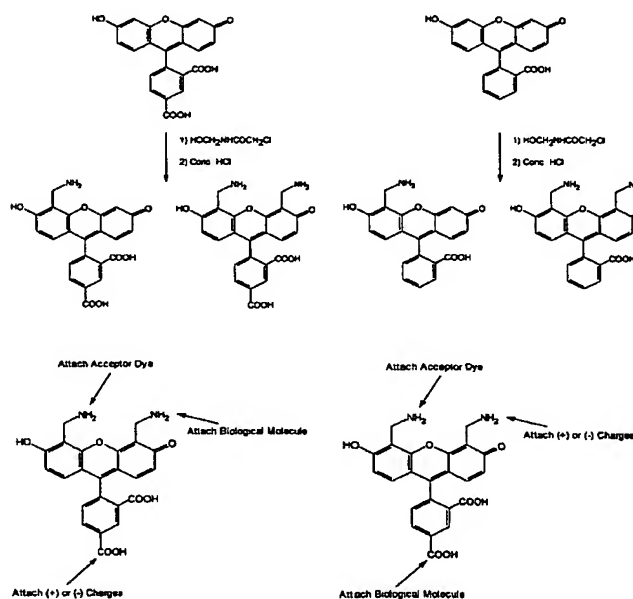
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(54) Title: ENERGY TRANSFER DYES, TERMINATORS AND USE THEREOF



(57) Abstract: The present invention relates to a novel set of four fluorescently labeled dye terminators. Two of them are single dye labeled terminators and the other two dye terminators are based on fluorescent resonance energy transfer (FRET). The FRET dye terminators are generated from the 4', 5'-bis-aminomethylfluorescein. Of the two amino groups of the donor dye, 4', 5'-bis-aminomethylfluorescein, one amino group is used to attach the acceptor dye, and the other amino group is used to attach the dideoxynucleoside-5'-triphosphate. Their preparation, energy transfer efficiency, and use as labels, specifically, in DNA sequencing reactions is disclosed.

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